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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,770	07/01/2003	James E. Brewer	A03P1047	4998
36802	7590	03/10/2009		
PACESETTER, INC. 15900 VALLEY VIEW COURT SYLMAR, CA 91392-9221				
EXAMINER				
GEDEON, BRIAN T				
ART UNIT		PAPER NUMBER		
3766				
MAIL DATE		DELIVERY MODE		
03/10/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/612,770

**Applicant(s)**

BREWER ET AL.

**Examiner**

Brian T. Gedeon

**Art Unit**

3766

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. This action in response to the amendment after non-final filed 24 December 2008. Claims 1-22 are pending.

### ***Response to Arguments***

2. Applicant's arguments filed with respect to the pending claims have been fully considered but they are not persuasive.
3. With respect that Burnes et al. do not disclose or suggest the recited claim elements, the Examiner respectfully disagrees. Regarding claims 1 15, 19, and 22, in view of figures 2A and 2B and paragraphs 44 and 47-51 of Burnes et al., an arrangement is described that delivers electrical signals using current source 52 to a first position using at least a first electrode 53 (or equivalent electrode 36a), located in or adjacent to a first cardiac chamber (i.e., the RA), and senses a potential by the delivered signal using at least a second electrode 54 (or equivalent electrode 38a) located at a second position in or adjacent to a second cardiac chamber (i.e., the RV). In view of this description in the cited paragraphs and figures, it is considered that Burnes et al. discloses these claimed elements. With respect to the inter-electrode distance, Burnes et al. substantially describe the invention as claimed, but do not explicitly teach that knowledge of the measured potentials can be used to ascertain information pertaining to the distance between the electrodes. Burnes et al. sense impedance between electrodes 36a and 38a using impedance detector 45. As

mentioned in the previous Office action, the impedance value is considered to be the ratio between sensed voltage potential and current, and therefore is related and equivalent to the sensed potential. Burnes et al. teach that impedance values can be greatly effected by the distance between the electrodes, which can be effected by breathing, para 22 and 83. Thus changes in impedance can indicate a change in the inter-electrode distance, and may be used to calculate a distance value. Though a distance calculation is not specifically described, the suggestion as to the importance of electrode distance in relation to the sensed impedance is considered to be enough motivation for consideration and derivation of a such a parameter by one of ordinary skill in the art. In view of this teaching, one of ordinary skill in the art would be motivated at the time the invention was made to ascertain information pertaining to the inter-electrode distance since changes in electrode distance can disrupt the reliability of the measured impedance values. Therefore the Examiner maintains the 35 U.S.C. 103(a) rejections against the pending claims.

4. Applicant's arguments with respect to claims 8 and 9 have been considered but are moot in view of the remarks above.

***Claim Rejections - 35 USC § 103***

5. As mentioned above, the rejections made under 35 U.S.C. 103(a) are maintained. Text of those rejections can be found in the previous Office action dated 2 October 2008.

***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Gedeon whose telephone number is (571) 272-3447. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl H. Layno can be reached on (571) 272-4949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Carl H. Layno/  
Supervisory Patent Examiner, Art Unit 3766

Carl H. Layno  
Examiner  
Art Unit 3766

/B. T. G./  
Examiner, Art Unit 3766  
7 March 2009